

certain extent be regarded as the result of their joint labours. In the present volume the same relation is preserved—the published contributions of both authors are reprinted, together with extracts from the MS. note-books above mentioned; while Mr. Hellins has supplemented the work of his friend with an appendix containing descriptions of those larvæ with regard to which nothing was written by Mr. Buckler, and with notes upon many of the other species. We have thus at the hands of these experienced and indefatigable workers a series of life-histories of the larger Lepidoptera of these islands of the most minute description, and we can only hope that the untimely decease of Mr. Hellins may not prove an obstacle in the way of the issue of the succeeding volumes.

Of the figures accompanying these descriptions, and which occupy thirty-five plates in the first two volumes, we can only say that in general they are very beautiful and life-like representations of the objects. In some cases, indeed, the colours, especially reds and greens, strike us as being rather too bright; but on the whole the figures leave little or nothing to be desired, and we can congratulate the student of British Lepidoptera on having furnished to him such a magnificent series of figures of the larvæ of nearly all his favourite insects. Of many species the caterpillars are figured at different ages, and occasionally the pupæ are illustrated.

A particularly valuable feature of the work is the addition of tables of the parasites which have been observed to issue from the larvæ and pupæ of the insects described in each volume. These tables have been furnished to the editor by Mr. G. C. Bignell, and it is to be hoped that their publication will induce others to take up a line of investigation which must lead to most interesting results.

## MISCELLANEOUS.

*Note on Tudicula inermis* &c. By EDGAR A. SMITH.

THERE are three species at present described which belong to *Tudicula*, namely *T. armigera*, A. Adams, *T. spinosa*, H. & A. Adams, and *T. inermis*, Angas. All are from the shores of Australia. The first and second species have been found at various localities on the coast of Queensland. *T. spinosa* also occurs in Torres Straits. The other species inhabits the western side of the continent. Mr. Angas in describing this species observes that “the exact locality of the habitat could not be satisfactorily determined,” as the specimens he had under examination were obtained from a dealer at Singapore.

The British Museum has recently acquired, through the liberality of Mr. T. H. Haynes, three specimens of this rare shell, collected by that gentleman at Exmouth Gulf, West Australia. Mr. Brazier, of Sydney, also informs me that he possesses examples of this species from Nicol Bay, somewhat further to the north-east of Exmouth

Gulf. The presence of this shell at Singapore is easily accounted for, as large numbers of shells are taken there from North-west Australia by the Trepanng traders and those engaged in the pearl-fisheries on that coast.

The three species are perfectly distinct. Mr. Tryon's supposition\* that *T. spinosa* is "probably identical with *T. armigera*," and that *T. inermis* (which should be of Angas, and not Sowerby) "is simply a depauperated specimen of the same species," is altogether incorrect. It is, however, a notorious fact that Mr. Tryon has made a large number of errors of this kind, and it is to be regretted that the usefulness of his work is in a great measure lessened through his rash judgment of the value of species which he has not had an opportunity of seeing personally.

All of the specimens of *T. inermis* received from Mr. Haynes have the canal fully six millimetres longer than that represented in Mr. Angas's woodcut †, and the colour is rather different. The general tone of the shell is lightish chestnut-brown, the angle of the body-whorl is spotted at intervals with white, a white band crossed by flames of a darker chestnut tint encircles the lower part of the body-whorl, and the aperture within, the columellar callus, and the thickened outer lip within and without are white.

#### *The Natural-History Museum.*

The Natural-History branch of the British Museum in Cromwell Road has just received a most important donation from Lord Walsingham, consisting of a collection of Lepidoptera with their larvæ, mainly British butterflies (Rhopalocera) and certain families of moths (Heterocera), including Sphingidæ, Bombycees, Pseudo-Bombycees, Noctuæ, Geometridæ, and Pyralidæ. There is also a fine series of Indian species, collected and preserved at Dharmasala, in the Punjab, by the Rev. John H. Hocking, and specimens of exotic silk-producing Bombycees, in various stages of their development, obtained mostly from Mons. Wailly.

With very few exceptions, the British larvæ, which retain a most life-like appearance and are placed upon models of the plants upon which they feed, have been prepared and mounted by Lord Walsingham himself—the process adopted having been inflation of the empty skin of the caterpillar by means of a glass tube and india-rubber spray-blower over a spirit-lamp guarded by wire gauze. This has been found a simpler and quicker process, and one admitting of more satisfactory manipulation than the alternative system of baking by means of heated metal plates or ovens. The specimens have mostly retained their natural colour; but in the case of the bright green species it has been found necessary to introduce a little artificial dry pigment. The whole collection consists of 2540 specimens of larvæ, belonging to 776 species, together with a series of the perfect insects of each species.

\* Manual Conch. vol. iii. p. 144.

† Proc. Zool. Soc. 1876, p. 610.